

MODIS IOT Weekly Report

Mission Operations Days: 2000/078 to 2000/084

March 17, 2000 20:00:00 GMT to March 24, 2000 20:00:00 GMT

Terra Spacecraft and MODIS Instrument Status:

Terra (AM-1) is in Normal Mode

MODIS is in Science Mode

MODIS has no known Anomalies

Blackbody	On	Nominal
Calibration Electronics	On	Nominal
Control Processor	A On; B off	Nominal
Door: Nadir	Unlatched, open	Nominal
Space View	Unlatched, open	Nominal
Solar Diffuser	Unlatched, closed	Nominal
FDDI Formatter	On	Nominal
FIFO Memory	On	Nominal
Format Processor	A On	Nominal
PC FPA	A On	Nominal
Power Supply: 1	On	Nominal
2	Off	Nominal
PV FPAs: VIS	A On	Nominal
NIR	A On	Nominal
SMIR	A On	Nominal
LWIR	A On	Nominal
Radiative Cooler:		
Outgas Heaters	Off	Nominal
LWIR FPA Heater	On	Nominal
SMIR FPA Heater	Off	Nominal
Scan Assembly	On	Nominal
SDSM	Off	Nominal
SRCA	Off	Nominal
Survival Heaters: PS1	Enabled	Nominal
PS2	Enabled	Nominal
Timing Generator	A On, B Off	Nominal
Flight Software	Rev BD	Nominal
Inhibit Ids Set	54 (SRCA)	Supsended SRCA activity
TMONs enabled	66,67	Nominal

This Week's Completed MODIS Activities:

Friday, March 17, 2000

077/20:41:03 ATC – OA16: SD/SDSM Screened Double

Saturday, March 18, 2000

078/03:16:35 ATC – OA16: SD/SDSM Open Double
078/09:52:06 ATC – OA16: SD/SDSM Screened Double
078/16:27:38 ATC – OA16: SD/SDSM Screened Double
078/23:03:09 ATC – OA16: SD/SDSM Open Double

Sunday, March 19, 2000

079/05:38:41 ATC – OA16: SD/SDSM Screened Double
079/12:14:12 ATC – OA16: SD/SDSM Screened Double
079/18:49:44 ATC – OA16: SD/SDSM Open Double

Monday, March 20, 2000

080/01:25:15 ATC – OA16: SD/SDSM Screened Double
080/08:00:47 ATC – OA16: SD/SDSM Screened Double
080/14:36:18 ATC – OA16: SD/SDSM Open Double
080/21:11:50 ATC – OA16: SD/SDSM Screened Double

Tuesday, March 21, 2000

081/03:47:21 ATC – OA16: SD/SDSM Screened Double
081/10:22:53 ATC – OA16: SD/SDSM Open Double
081/14:54:39 Real-time Set Blackbody duty cycle to 100%
081/15:00 ATC – Blackbody to 315K
081/16:58:24 ATC – OA16: SD/SDSM Screened Double
081/22:00:00 ATC – Blackbody to 270K
081/22:15:58 Real-time Set Blackbody duty cycle to 33%
081/23:33:56 ATC – OA16: SD/SDSM Screened Double

Wednesday, March 22, 2000

082/19:00:00 ATC – Blackbody to 290K

Thursday, March 23, 2000

083/03:55:08 – 04:07:15 Real-time Ecal Sweeps; Vcal starts 48,43,53,60
8 Vcal steps of 1 DN, Nstep of 20,20,20,8
083/05:32:12 – 05:45:02 Real-time Ecal Sweeps; Vcal starts 48,43,53,60
8 Vcal steps of 1 DN, Nstep of 18,18,18,6
083/07:09:41 – 07:21:56 Real-time Ecal Sweeps; Vcal starts 48,43,53,60
8 Vcal steps of 1 DN, Nstep of 22,22,22,10
083/14:40 Real-time Set SMIR Itwk/Vdet to 100/218
083/14:41 Real-time Set Blackbody duty cycle to 100%
083/15:00:00 ATC – Blackbody to 315K
083/21:28:20 Real-time Set Blackbody duty cycle to 33%
083/22:00:00 ATC – Blackbody to 270K

Friday, March 24, 2000

084/01:02:43 ATC – OA-16 SD/SDSM Screened

084/02:41:46 ATC – OA-15 SD/SDSM Open
 084/13:00:00 ATC – Blackbody to 290K
 084/16:44:45 ATC – Moved Formatter to Night up 08:46 to account for roll data increase
 084/16:52:51 ATC – Roll slew to –19.5 begins (07:20 slew time plus 01:10 settle time)
 084/17:00:03 ATC – Formatter to Day Rate to get all bands during roll
 084/17:00:05 ATC – PV DC Restore OFF
 084/17:00:07 ATC – PC DC Restore OFF
 084/17:00:09 ATC – Sector Rotation to delta of –3072
 084/17:08:43 ATC – Sectors Rotation to nominal (delta = 0)
 084/17:08:45 ATC – PC DC Restore ON
 084/17:08:47 ATC – PV DC Restore ON
 084/17:08:49 ATC – Formatter to Night Rate
 084/17:16:21 ATC – Begin return slew
 084/17:58:00 Real-time Set SMIR Itwk / Vdet to 110 / 226

This Week's Scheduled MODIS Activities Not Completed:

082/12:01:13 ATC – OA-23 SRCA Full Spatial (inhibited)
 084/08:28:01 ATC – OA-22 SRCA Full Spectral Part 1 (inhibited)
 084/10:22:46 ATC – OA-22 SRCA Full Spectral Part 2 (inhibited)
 084/11:45:11 ATC – OA-22 SRCA Full Spectral Part 3 (inhibited)
 084/13:40:31 ATC – OA-22 SRCA Full Spectral Part 4 (inhibited)

Upcoming MODIS Events:

*SRCA activities are scheduled, but inhibited (so they will not execute) unless changes to the inhibit ID (#4) are noted

Friday, March 24, 2000

084/20:02:31 ATC – Moved Formatter to Night up 08:46 to account for roll data increase
 084/20:09:57 ATC – Roll slew to –19.0 begins (07:10 slew time plus 01:10 settle time)
 084/20:16:59 ATC – Formatter to Day Rate to get all bands during roll
 084/20:17:01 ATC – PV DC Restore OFF
 084/20:17:03 ATC – PC DC Restore OFF
 084/20:17:05 ATC – Sector Rotation to delta of –3072
 084/20:25:39 ATC – Sectors Rotation to nominal (delta = 0)
 084/20:25:41 ATC – PC DC Restore ON
 084/20:25:43 ATC – PV DC Restore ON
 084/20:25:45 ATC – Formatter to Night Rate
 084/20:33:17 ATC – Begin return slew

Saturday, March 25, 2000

No activities

Sunday, March 26, 2000

No activities

Monday, March 27, 2000

087/03:12:28 ATC OA-16 SD/SDSM Screened

087/04:51:21 ATC OA-15 SD/SDSM Open

087/13:58:18 ATC OA-19 SRCA Full Radiometric

Tuesday, March 28, 2000

088/07:00:00 ATC Blackbody to 280K

088/12:00:00 ATC Blackbody to 285K

088/15:00:00 ATC Blackbody to 290K

088/17:00?? Real-time Set Blackbody duty cycle to 100%

088/17:00:00 ATC Blackbody to 295K

088/19:00:00 ATC Blackbody to 300K

088/19:00?? Real-time Set Blackbody duty cycle to 33%

088/19:00?? Real-time Reset inhibit ID #54 (SRCA)

088/21:00:00 ATC Blackbody to 270K

Wednesday, March 29, 2000

089/12:00:00 ATC Blackbody to 290K

089/13:45:46 ATC OA-23 SRCA Full Spatial

089/?? ATC OA-16 SD/SDSM Screened

Thursday, March 30, 2000

090/15:00:00 ATC Blackbody to 315K

090/15:00?? Real-time Set Blackbody duty cycle to 100%

090/22:00:00 ATC Blackbody to 270K

090/22:00?? Real-time Set Blackbody duty cycle to 33%

Friday, March 31, 2000

091/11:51:23 ATC OA-22 SRCA Full Spectral Part 1

091/13:46:08 ATC OA-22 SRCA Full Spectral Part 2

091/15:08:34 ATC OA-22 SRCA Full Spectral Part 3

091/17:03:54 ATC OA-22 SRCA Full Spectral Part 4

091/19:00?? Real-time Set inhibit ID #54 (SRCA)

091/19:00:00 ATC Blackbody to 290K

091/?? ATC OA-16 SD/SDSM Screened

Saturday, April 1, 2000

No Activities

Maneuvers:

Deep Space Cal (no moon) -- Postponed
Deep Space Cal (with moon) -- Postponed
Tue, April 25, 2000 - MODIS Yaw Maneuvers
Wed, April 26, 2000 - MODIS Yaw Maneuvers
Thur, April 27, 2000 - Inclination Maneuver
Fri, April 28, 2000 - Post-inclination Drag Makeup Maneuver

MODIS Anomalies:

None.

General Instrument Comments:

MODIS is in Science Mode on the A-side with the SVD and NAD open.

MODIS Telemetry Trends:

Telemetry is nominal.

Non-MODIS Significant Events:

The roll maneuvers to view the moon in the space view port were successful. Data analysis is pending.

Limited Life Item Status:

SRCA 10W Lamp #1: 146.0 of 500 hours
SRCA 10W Lamp #2: 124.5 of 500 hours
SRCA 10W Lamp #3: 133.7 of 500 hours
SRCA 10W Lamp #4: 61.5 of 500 hours

SRCA 1W Lamp #1: 545.5 of 4000 hours
SRCA 1W Lamp #2: 276.3 of 4000 hours

Solar Diffuser Door: 1170 of 3022 Movements
Nadir Aperture Door: 530 of 1316 Movements
Space View Door: 436 of 1316 Movements